

REGULATION BRANCH
Division of Water Resource Management

FROM: Janet DATE: 4/2/91 FILE IN: _____

TO: _____ INITIAL: _____ PLEASE: _____ REMARKS: _____

____ G. MATSUMOTO
____ F. Ching

____ T. Kam
____ S. Samuels
✓ De D. Nakano
____ S. Yong
____ C.P. Chang
____ J. Swift
____ T. Nakama
____ H. Lee
____ M. Holt
____ B. Micua

____ G. AKITA
____ L. Nanbu
____ E. SAKODA
____ E. LAU
____ L. CHANG
____ Y. SHIROMA
____ M. TAGOMORI
____ S. Kokubun

____ See Me
____ Call
✓ Review & Comment
____ Take Action
____ Investigate & Report
____ Draft Reply
____ Acknowledge Receipt
____ Type Draft
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____ Xerox _____ copies
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____ Mail

FOR YOUR:

____ Approval
____ Signature
____ Information

draft response to regarding

Bill Tan's request

7/13/91

OK

In finalizer and follow-up as needed.

Dee

DRAFT

July 17, 1991

Dr. Rita B. Johnson
Mayor's Office of Information and Complaint
Hawaii County
Aupuni Street
Hilo, Hawaii

OK
typed
final
D

Subject: Request for Investigation and Service Report, re: Mr.
Duane Hanson, dated 01/30/91

Dear Dr. Johnson,

My staff has investigated the complaint you forwarded to Attorney General Price. We have concluded that there were no incidents resulting in emissions significant enough to have caused respiratory problems. Records are available should you or your agent wish to study them.

If you have any further questions, please call Deputy Director Manabu Tagomori at 548-7533.

Sincerely yours,

William W. Paty,
Chairperson

DRAFT

July 17, 1991

*Revise and
finalize*

MEMORANDUM

TO: Mr. William M. Tam, Deputy Attorney General
FROM: Manabu Tagomori, Deputy Director
SUBJECT: Duane Hanson/Rita Johnson Complaint Regarding Ormat's
Geothermal Venting, Puna, Hawaii - your memorandum dated
February 25, 1991

Enclosed is a copy of Mr. Paty's response to Dr. Rita Johnson.
Please let me know if any further inquiry is required.

You should redraft as follows

Background

Analysis

*(make reference to your memo to Marcha and
attach to memo to AG)*

Conclusion

*What actions you will or have taken in response
to your investigation.*

DRAFT

*Revise and
finalize*

Memorandum

To: Manabu Tagomori

From: Janet Swift

Subject: Investigation Regarding Duane Hanson/Rita Johnson
Complaint Regarding Geothermal Venting

Deputy Attorney General William Tam in his memorandum of February 25, 1991 has requested that you investigate and take appropriate action including contact with governmental agencies as may be revelant regarding various complaints of Mr. Duane Hanson and others.

The materials forwarded by Mr. Tam include a complaint taken by Dr. Rita Johnson of Hawaii County Mayor's Office of Information and Complaint dated January 30, 1991 complaining about venting every night by Ormat and True. Dr. Johnson has referred Mr. Hanson to the Attorney General's Office and has requested their response to the complainant as well as to her office regarding avenues for help. Prior efforts have been of no help, according to Dr. Johnson's report. Attachments to Dr. Johnson's report include a letter from Alexsis Risk Management Service to Mr. Hanson regarding a 9/0/89 complaint regarding repairs to his automobile. Alexsis (Maria Paet) denies his claim and refers him to HELCO who is responsible for all operation and maintenance. Another letter attached is from DAGS to Mr. Hanson and is dated October 9, 1989, and refers to a claim dated September 23, 1989, and refers Mr. Hanson to Alexsis Risk Management. A third letter is attached from Thomas M. Green, M.D. to whom it may concern, dated September 29, 1989, and says that Mr. Hanson was seen and treated on September 6, 1989 for respiratory distress. The doctor says "Since Mr. Hanson has no prior history of asthma or wheezing, I presume his illness was directly related to exposure to the geothermal venting." Other letters from Thomas E. Luebben, Attorney-at-Law indicate that Attorney Luebben cannot take Mr. Hanson's case because he is not licensed to practice law in Hawaii. Another memorandum attached is dated 9/28/89 and addressed to whom it may concern from Curtiss B. Wright, Staff Psychiatrist with the Veterans Administration, and says that Mr. Hanson is a disabled veteran seen regularly for medical and psychiatric treatment whose emotional condition has definitely been adversely affected by his recent exposure to apparently noxious fumes, near his residence."

I consulted the file on the HGP-A plant, and found that our files only go through April 1989. I telephoned Dr. Don Thomas who was involved with the project to find out if there had been any unusual incidents either in September 1989 or in January 1991, the two time periods mentioned in Mr. Hanson's complaints. Dr. Thomas said that there were problems with HGP-A in September 1989 while he was on the mainland. He did confer by telephone at that time with those in charge of the HGP-A project, a Mr. Frank Hicks who was on contract with NELH, and a Mr. Frank Kennedy of HELCO, the

*too
long
hard
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read
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shorter
paragraphs*

prime operator. According to Dr. Thomas, the incident had to do with the abatement system. There were two types of abatement supposed to take effect when needed, a chemical abatement system and a water abatement system. The problem was with the water abatement system. The County had changed the pressure on the water line going into the plant to a lower pressure. This lower pressure was not adequate to allow the abatement system to operate. The problem was not apparent for several days. When it was discovered, a booster pump was put on and the system worked. The time it took to discover the problem and correct it was about 2 to 3 days. During this time there was a bad smell in the area. However, Dr. Thomas said that the H₂S was being continually monitored by NELH downwind of the plant and there never was a dangerously high reading.

Dr. Thomas did not think there was a particular file that could be found on this September 1989 incident, but he believes he has the files of the H₂S monitoring for that period.

As to the January 1991 complaint, Dr. Thomas knows of no incident that occurred in that time frame that Mr. Hanson could be complaining about. Nothing appeared at that time in the newsclippings regarding such an incident, although the Pacific International Center for High Technology Research was to conduct the Downhole Coaxial Heat Exchange process at the HGP-A well around that time, and residents were reportedly nervous about reopening of the well for this purpose because there were no monitoring plans in place in connection with this project.

It is certainly within Mr. Hanson's rights to sue the various parties that he has complaints with, but as far as Dr. Thomas is concerned, although there were problems in September 1989, they were not of the magnitude that is associated with respiratory problems, and the monitoring data is available to refer to. In January 1991 there was no particular incident that could have prompted an unusual smell or atmospheric condition in the Pohoiki area.

I suggest a memorandum be drafted to Dr. Johnson of the Mayor's Office of Information and Complaint to let her know there were no incidents resulting in emissions significant enough to have caused respiratory problems, and that the records are available should she or her agent wish to study them.

DIVISION OF WATER AND LAND DEVELOPMENT

FROM: _____ DATE: 4/2/74 FILE IN: _____

TO: INIT: PLEASE: REMARKS:

<input type="checkbox"/>	<input type="checkbox"/>	G. Akita	<input type="checkbox"/>	See Me
<input type="checkbox"/>	<input type="checkbox"/>	L. Chang	<input type="checkbox"/>	Call
<input type="checkbox"/>	<input type="checkbox"/>	E. Lau	<input type="checkbox"/>	Review & Comment
<input type="checkbox"/>	<input type="checkbox"/>	A. Monden	<input type="checkbox"/>	Take Action
<input type="checkbox"/>	<input type="checkbox"/>	H. Young	<input type="checkbox"/>	Investigate & Report
<input type="checkbox"/>	<input type="checkbox"/>	T. Kam	<input type="checkbox"/>	Draft Reply
<input type="checkbox"/>	<input type="checkbox"/>	G. Miyashiro	<input type="checkbox"/>	Acknowledge Receipt
<input type="checkbox"/>	<input type="checkbox"/>	D. Lee	<input type="checkbox"/>	Type Draft
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	Type Final
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FOR YOUR:

_____	_____	M. TAGOMORI	_____	Approval
_____	_____	L. Nanbu	_____	Signature
			_____	Information



RECEIVED
Civil Defense Agency

Lorraine R. Inouye
Mayor

County of Hawaii • 920 Uluani St • Hilo, Hawaii 96720 • (808) 935-0031 • Fax (808) 935-6460

07230

TO: Norman Hayashi, Planning Director
Bruce McClure, Chief Engineer, Dept. of Public Works
Glenn Nakamura, Labor Programs Field Manager,
Dept. of Labor & Industrial Relations
✓ William Paty, Chairperson,
Dept. of Land & Natural Resources

FROM: Harry Kim, Administrator H/Kim

DATE: February 25, 1992

SUBJECT: Puna Geothermal Venture Project
"William D. Foster"

Enclosed is a copy of a fax correspondence received from William D. Foster. He raises several questions that cannot be addressed by this agency due to the lack of expertise or authority. I have been contacted by Trustee Moanikeala Akaka of the Office of Hawaiian Affairs regarding this issue and have been asked for a follow up response.

May I ask for your assistance in addressing this correspondence by Mr. Foster in the area of your authority or by referring me to the proper individual?

ayk

Encl.

Date: 19 Feb. 92

From: William D. Foster

To: Harry Kim
Civil Defense - Hawaii

FAX# 935-6460

Subj: PUNA GEOTHERMAL PROJECT: Questions concerning,

Dear Mr. Kim;

I am currently the President and NDT Level III for WILLIAM D. FOSTER & ASSOC. INC.. Last summer, during the construction phase of the subject project, I was working as a radiographer for another inspection firm in Honolulu and was tasked on several occasions to perform radiographic inspections on the piping welds at the PUNA GEOTHERMAL PROJECT. As a result of these inspections and coupled with my twenty plus years in the Quality Assurance and Nondestructive Testing field, I would like to present to you some questions/concerns I have in regards to the subject project.

Although it may not be necessary, perhaps I should take a moment to try to explain and give you a better understanding of what I'm talking about when I use the word RADIOGRAPHY. For ease of explanation it is the same as X-Ray. We were taking radiographs (X-Rays) of the welds, looking for discontinuities which were in excess of that allowed by the prescribed Acceptance Standards.

Although these inspections took place several months ago and I'm drawing strictly from memory, I believe that all the radiographs were evaluated to the requirements of ASME "AMERICAN SOCIETY OF MECHANICAL ENGINEERS" Code, Section B31.1 (Power Piping). Although, I don't know it to be a fact, I believe it to be a fair assumption that if ASME B31.1 was the Code for inspection, then it must have been the Code for the Welding and Inspection Requirements as well.

We were only tasked with performing inspections on a percentage of the actual number of welds put into the system. This exact number is not known to me. We were physically shown what welds to inspect and not to inspect by our client, who were also the contractor making the welds.

On one occasion we were tasked to inspect some welds that we told were made by the Israelies's. Upon examination I was actually shocked at just how bad these welds were. The fact that these welds were rejectable and the film and reports were given to the contractor, Scott Company, who were our client. **We were never tasked with inspecting any repairs on these weldments. Were they ever repaired?**

The argument may be waged that these welds never should have been radiographed or that they are in an incidental system which would not present any danger if the system leaked. My contention is that anytime a problem is identified, it should be remedied at that time. Operational repairs cost more than construction repairs normally and who do you suppose will bear the costs of these repairs?

The ASME B31.1 Code does not require that radiography be performed on every weld in every system. Table 136.4 gives the **MANDATORY NONDESTRUCTIVE EXAMINATION REQUIREMENTS FOR PRESSURE RETAINING COMPONENTS**. It seems strange to me that if a system had weldments requiring radiography that 100% of these weldments were not inspected. I know of no where in B31.1 which allows for only partial radiography. This is allowed in other sections of the ASME Code dealing with ~~other~~ ^{other} components, but it is not generally considered good engineering practice to utilize any other code to obtain less stringent requirements.

ASME B31.1 also requires that other nondestructive tests be performed on certain weldments, as outlined in Table 136.4. It is also a requirement of B31.1 that **all welds be visually inspected**. Though it may seem simple enough, the fact is that Visual Inspection is actually one of the most important and most difficult inspections to perform properly and also one of the most abused or misused by persons not qualified to perform the inspection. Contractors often "claim" that the person that performed the visuals was qualified, when in fact they were not. It takes considerable training before an individual is truly qualified to perform Visuals properly. This is the reason why often times a CWI, Certified Weld Inspector, is retained at the job site. Even though a weld may look pretty, it can and often does contain defects which can go un-noticed to the untrained eye. These defects can have very detrimental effects on the integrity of the weld over a period of time. **Who performed the visual inspections for these welds?** I am only guessing, but I believe that the visuals were performed by the contractor. I question the wisdom of allowing the fox to inspect the hen house. **Also, were liquid penetrant or magnetic particle inspections performed and if so by whom?** We never performed any of these inspections.

My last question at this point is this. **Was ASME B31.1 the correct code in the first place?** The Power Piping Code doesn't address "Lethal Substances", probably because this piping contains none in conventional steam systems connected to conventional boilers. The code, ASME, does address this in the Pressure Vessel section because even in conventional systems, some pressure vessels contain "lethal substances". The Pressure Vessel requirements are that with a very few exceptions, 100% of the welds in the vessels containing "lethal substance" are to be radiographed for their entire length. Considering that the piping at Geothermal in some cases has among it's contained substances Hydrogen Sulphide which is a "lethal substance" by ASME definition, why wouldn't 100% of these weldments require radiography?

For over twenty years I have been involved and actively engaged in the Quality Assurance and Nondestructive Testing fields for both Nuclear and Conventional systems and it is my contention that the old saying "an ounce of prevention is worth a pound of cure" is one that must be adhered to when threat to ecology or human life is involved. I'm not contending or implying that anything was done at the subject project unsafely or incorrectly. I am only posing these questions and if documentation and records are as I would expect they should be, these should be easily answered. Thank you for your assistance and interest in this matter. For any questions please feel free to call upon me.